

*Sub C*

WHAT IS CLAIMED IS:

1. An alternator comprising:
  - a rotor for forming north-seeking (N) and south-seeking (S) poles alternately about a rotational circumference; and
  - a stator comprising:
    - a stator core surrounding said rotor; and
    - a polyphase stator winding installed in said stator core, said stator core being formed with a number of slots extending axially at a predetermined pitch in a circumferential direction and being provided with an abutting portion extending axially, said abutting portion making said stator core into an annular shape by abutting end portions of said stator core, said polyphase stator winding comprising a number of winding portions in which long strands of wire are wound so as to alternately occupy an inner layer and an outer layer in a slot depth direction within said slots at intervals of a predetermined number of slots, said strands of wire folding back outside said slots at axial end surfaces of said stator core, and
    - an insulating member being interposed between said stator core and said winding.
2. A method for manufacturing the alternator according to Claim 1 wherein said insulating member is first disposed on said winding before said winding is inserted into said slots of said stator core.
3. A method for manufacturing the alternator according to Claim 1 wherein:
  - a base insulating member is first disposed between said slots and said winding; and
  - said insulating member is interposed between said stator core and said winding by inserting said winding into said slots.
4. The method according to Claim 3 for manufacturing the alternator according to Claim 1 wherein:
  - a straight base insulating member is first disposed between said slots and said winding;
  - said base insulating member is interposed between said stator core and said winding by inserting said winding into said slots; and

said insulating member is later formed by dividing said base insulating member between said slots.

5. The method according to Claim 3 for manufacturing the alternator according to ~~Claim 1~~ wherein:

a straight base insulating member is first disposed between said slots and said winding; and

said insulating member is formed by dividing said base insulating member between said slots as said winding is being inserted into said slots and said base insulating member is being interposed between said stator core and said winding.

6. The method according to Claim 3 for manufacturing the alternator according to ~~Claim 1~~ wherein:

a straight base insulating member is first disposed between said slots and said winding;

said base insulating member is interposed between said stator core and said winding by inserting said winding into said slots; and

said insulating member is later formed by dividing said base insulating member between said slots together with inner circumferential dimension processing of said stator core.

7. The method according to Claim 3 for manufacturing the alternator according to ~~Claim 1~~ wherein:

a straight base insulating member is first disposed between said slots and said winding;

said base insulating member is interposed between said stator core and said winding by inserting said winding into said slots; and

said insulating member is later formed by dividing said base insulating member between said slots after securing said base insulating member with resin.

8. The method according to Claim 3 for manufacturing the alternator according to ~~Claim 1~~ wherein said insulating member is formed by dividing said base insulating member between said slots when end portions of teeth defining said slots are being pressed and plastically deformed.

9. The method according to Claim 2 for manufacturing an alternator wherein said insulating member is composed of insulating paper.
10. The method according to Claim 2 for manufacturing an alternator wherein said insulating member is composed of a resin.